

FIGURE 1

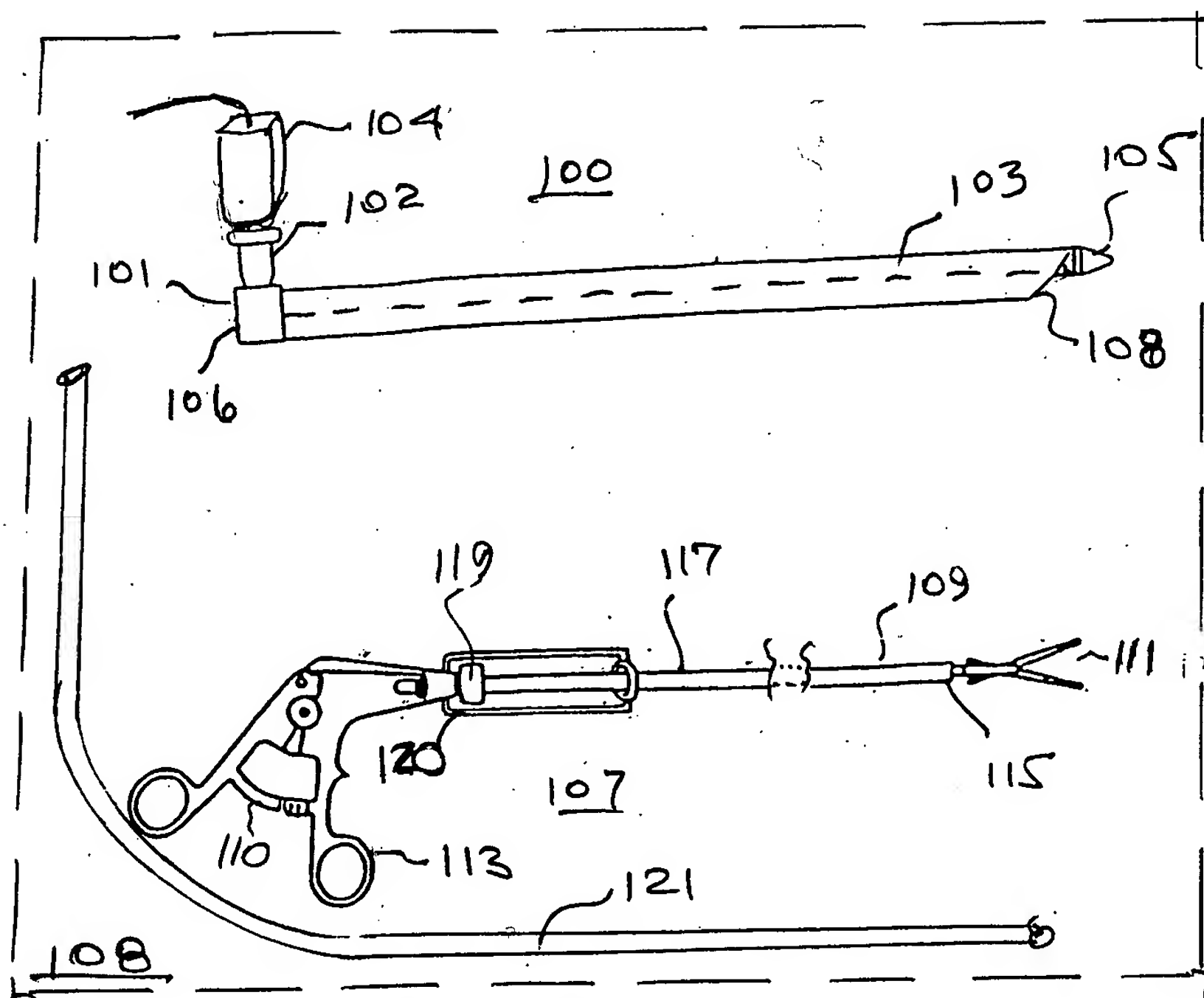


FIGURE 4

PERFORM SUBXIPHOID SKIN INCISION ~ 17

|

BLUNTLY DISSECT TO EXPOSE LINEA ALBA ~ 19

|

INCISE THE LINEA ALBA ~ 21

|

INSERT FINGER TO FORM TRACT TO UNDERSIDE OF XIPHOID PROCESS AND STERNUM ~ 23

|

INSERT ENDOSCOPIC SUBXIPHOID CANNULA IN SUBXIPHOID INCISION ~ 25

|

ADVANCE CANNULA THROUGH DIAPHRAGM TO THE ANTERIOR SURFACE OF THE PERICARDIUM ~ 27

|

BLUNTLY DISSECT FAT FROM ANTERIOR SURFACE OF PERICARDIUM ~ 29

|

INSERT PERICARDIAL ENTRY INSTRUMENT THROUGH WORKING CHANNEL OF THE ENDOSCOPIC CANNULA ~ 31

|

GRASP PERICARDIUM NEAR APEX OF THE HEART; UNLOCK, ADVANCE AND ROTATE CIRCULAR CUTTER TO ENTER PERICARDIUM ~ 33

|

ADVANCE ENDOSCOPIC CANNULA TO ENTRY OF THE TRANSVERSE PERICARDIAL SINUS ~ 35

|

REMOVE PERICARDIAL ENTRY INSTRUMENT AND INSERT PROBE OR SHEATH INTO WORKING CHANNEL OF THE ENDOSCOPIC CANNULA ~ 37

FIGURE 2a

↓ TO FIG. 2b

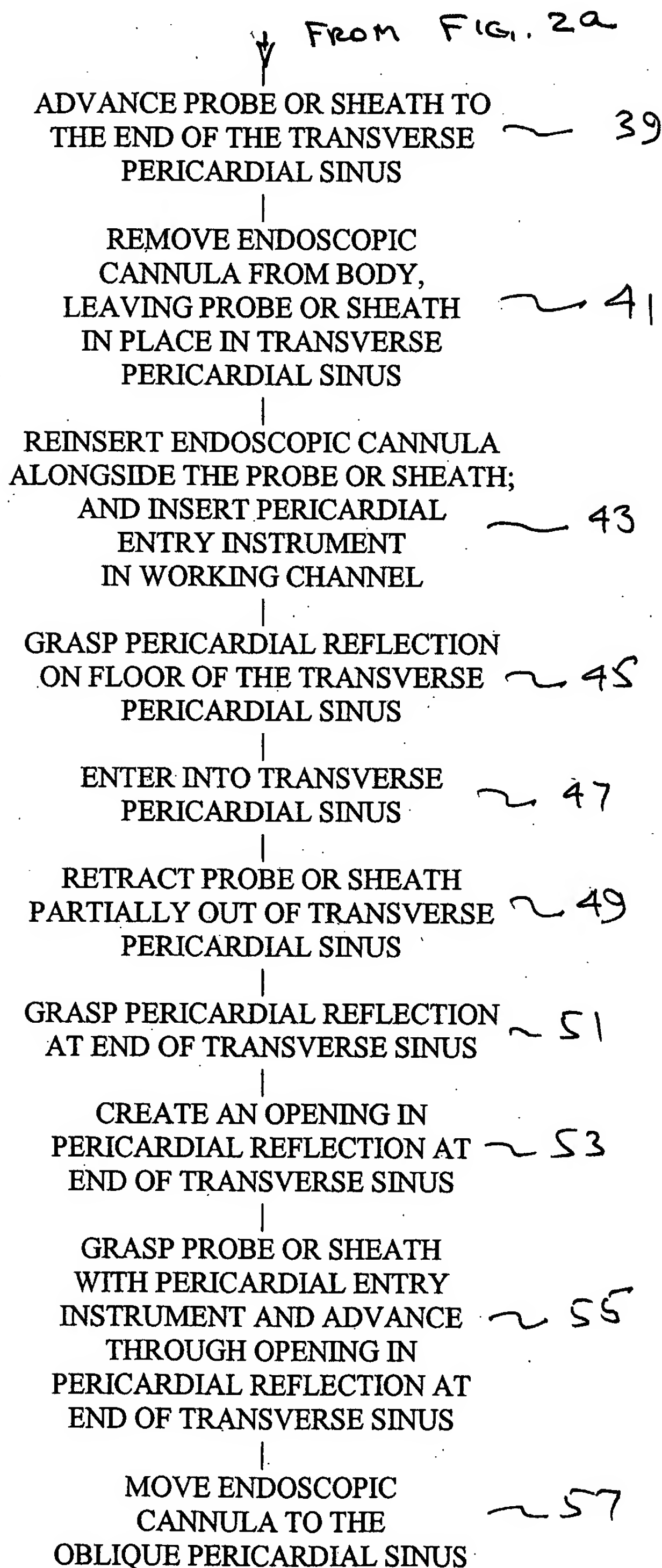


FIGURE 2b

↓ To FIG. 2c

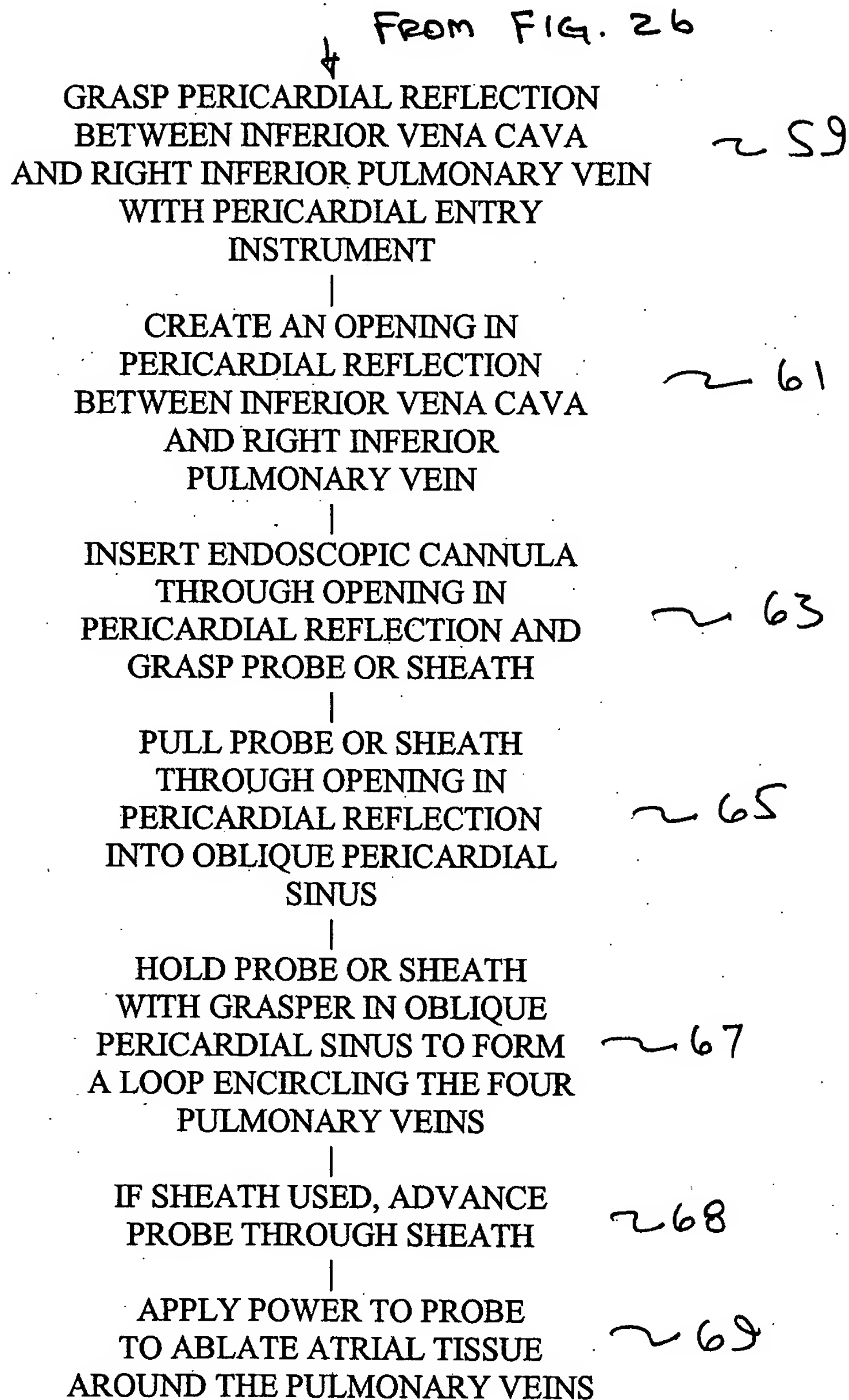


Figure 2C

PERFORM A 1.5-2.0 CM SUBCOSTAL INCISION ~ 71
|
DISSECT BLUNTLY TO EXPOSE ANTERIOR RECTUS SHEATH ~ 73
|
PERFORM A 1.5-2.0 CM INCISION IN THE ANTERIOR RECTUS SHEATH ~ 75
|
SPREAD RECTUS MUSCLE TO EXPOSE THE POSTERIOR RECTUS SHEATH ~ 77
|
PERFORM A 1.5-2.0 CM INCISION IN THE POSTERIOR RECTUS SHEATH ~ 79
|
INSERT FINGER IN INCISION IN POSTERIOR RECTUS SHEATH TO FORM A TRACT TO THE INFERIOR BORDER OF THE COSTAL MARGIN ~ 81
|
INSERT ENDOSCOPIC CANNULA INTO TRACT ~ 83
|
ADVANCE ENDOSCOPIC CANNULA THROUGH MUSCULAR DIAPHRAGM INTO PLEURAL CAVITY ~ 85
|
INSERT PERICARDIAL ENTRY INSTRUMENT INTO WORKING CHANNEL OF THE ENDOSCOPIC CANNULA ~ 87
|
GRASP THE PLEURA OVERLYING THE APEX OF THE HEART WITH THE PERICARDIAL ENTRY INSTRUMENT ~ 89

FIGURE 3Q

↓ TO FIG. 3b

↓ FROM FIG. 3a

CREATE AN OPENING
THROUGH THE PLEURA ~ 90

|

GRASP THE PERICARDIUM
OVERLYING THE APEX
OF THE HEART ~ 91
WITH THE PERICARDIAL
ENTRY INSTRUMENT

|

CREATE AN OPENING
THROUGH THE ~ 93
PERICARDIUM

|

INSERT THE ENDOSCOPIC
CANNULA THROUGH THE ~ 95
OPENING TO ACCESS
THE HEART

Figure 3 b